

TO THE CHAIRMAN AND MEMBERS
OF THE
GUISBOROUGH URBAN DISTRICT COUNCIL.



MADAM AND GENTLEMEN,

I beg to submit my Annual Report for the year 1944, in accordance with the Ministry of Health Circular 49 45. It is shorter than pre-war reports, but, in view of the removal of the restriction on the publication of population figures, etc., I have thought it might be of interest to resume the inclusion in the report of summaries of figures providing some measure of the health of the population, in order that an estimate may be made of the direction and extent of any progress or change.

The Registrar-General estimates the population of the urban district at the middle of 1944 as 7,737; from 1939, when the estimated population was 8,025, the numbers each year were gradually reduced until for mid-1943, the estimate was 7,231. The present figure therefore shows a sudden increase of 506. In the long absence of any correction by a census this figure of population and all the rates based on it, must be taken with reserve.

There were 146 births in the year; in the five years 1934—38 the average annual number of births was 133, and in the five years 1939—43, 137; the number of births in 1944 has only been exceeded in recent years in 1940 when there were 154. On The Registrar-General's estimated population the birth-rate for 1944 was 18·9, as compared with 18·1 in the five years 1939—43 and 16·6 in the period 1934—38.

There were 89 deaths of residents of the district during 1944; this compares with an average of 101 deaths per year in the period 1934—38, and 114 deaths per year 1939—43. The 1944 local death-rate is 11·5; that for England and Wales is 11·6.

There were 12 infant deaths in 1944, corresponding to an infant mortality rate of 82 infant deaths per thousand births, or not far from double the infant mortality rate of 46 in the country as a whole. Obviously, however, the calculation of an infant mortality rate per 1000 births from an experience of one particular sample of 146 births is not very reliable, and even the average over five years only deals with between 600 and 700 births. One is on rather surer statistical grounds if one takes the Combined Districts as a whole, with 1,195 births in 1944 there were 45 infant deaths, or an infant mortality rate of 38.

These vital statistics, and the figures for earlier five-year periods for comparison are given in Table 1 at the end of this report. The table covers a period of sixty years. The earliest "Annual Report of the Medical Officer of Health" for this district that I have is for the year 1882 and a few figures will illustrate the changes that have occurred since then. In 1882 the population of the district was 6,616—about 1,100 less than the present figure: the number of deaths however was 122 compared with the 1944 figure of 89. But it is when one compares the ages at which these deaths occurred that the greatest change is seen. In 1882 55 of the deaths occurred under the age of 1 year and 15 only at the ages of 60 years or more: in 1944 12 of the deaths occurred under the age of 1 year and 46 at ages of 65 years and upwards. Expressing this in another way the average age of those dying in the district in 1882 was 14 years; in 1944 it was 54 years. One cannot conclude that in these 60 years the span of life in the district has been lengthened by 40 years, for that is

vitiated by the fact that the population of the district in 1882 contained a far larger proportion of children and a much fewer number of old people than in 1944; there were, for instance, 285 children born in 1882 compared with what we now consider the quite large figure of 146 for 1944. The altered incidence of death is partly the cause and partly the result of the changed age-constitution of the population.

Infectious disease was not prevalent in the district in 1944: there were eight cases of scarlet fever, all in Guisborough itself, four from February to April and four in November and December. This disease is now usually one of the least dangerous of the infectious diseases, and, for those cases removed to hospital and treated with scarlet fever antitoxin, an isolation period of two weeks is usually found sufficient.

Five cases of measles were notified: three in the village of Upleatham and two in Guisborough.

One case only of diphtheria, in a girl of 18 years, was notified. At the end of 1944 it was estimated that 63% of the children under 5 years of age in the district and 72% of those from 5 to 14 years old had been immunised. In September leaflets were distributed to parents through the schools by the kind assistance of the Head Teachers and slides were exhibited at the local cinema urging immunisation as a protection against diphtheria. The numbers immunised in this and adjoining districts during 1944 are given in the following table; in this district 134 children were immunised, a number just short of the number of children born in 1943—who would, during 1944 have reached the age at which they should be protected by immunisation.

Diphtheria Immunisation : N. R. Combined Districts.

	Guisborough U.D.	Loftus U.D.	Redcar Borough.	Saltburn and Marske U.D.	Skelton and Brotton U.D.
No. of children immunised :					
during 1943	145	223	890	176	410
during 1944	134	114	437	111	58
Estimated number of children under 5 years of age	620	635	1810	459	1090
Estimated percentage of these immunised at end of 1944	63	48	66	80	60
Estimated number of children aged 5—14 years	1187	1225	3698	816	1957
Estimated percentage of these immunised at end of 1944	72	75	65	98	60
(A) Cases of diphtheria in 1944 in children under 15 years	1	7	36	0	1
(B) Number included in (A) known to have completed a course of immunisation not less than 12 weeks before the onset	0	4	16	—	0
(C) Deaths from diphtheria in 1944 in children under 15 yrs.	0	0	2	0	0
(D) Number included in (C) known to have completed a course of immunisation not less than 12 weeks before the onset of the disease	—	—	0	—	—

There were four new cases of tuberculosis during the year and two deaths from this disease; both these figures compare quite well with pre-war figures. The following table illustrates the progress that has been made in dealing with tuberculosis :—

Deaths from Respiratory Tuberculosis: N. R. Combined Districts.

	Number of deaths from Resp. Tuberc.	Unnotified before death.	Number	Notified before Death.		
				Percentage known sputum positive.	% dying within one month of notification.	% dying five years or more after notification.
1920—24	... 187	70	117	25	26	0·0
1925—29	... 173	36	137	46	17	3·6
1930—34	... 110	17	93	58	16	7·5
1935—39	... 105	18	87	68	13	13·8
1940—44	... 125	17	108	71	10	9·3

The number of deaths decreased in each successive period with the exception of the last, when war conditions were responsible for some increase. The proportion of cases unnotified before death has fallen from 1 in 3 to about 1 in 7, and most of these latter, occurring in institutions outside the area, may have been notified in the district of occurrence. The percentage of the notified cases known to be sputum positive has increased steadily from 25% to 71%, owing to the increasing use being made of laboratory facilities provided. In the earliest period 26% of those dying died within one month of notification, as against 10% in the last period, while in the five years prior to the war over 13% of those dying had survived at least five years after notification, the largest proportion so far achieved.

Verminous Infestation: Although there has probably been, due to war-time conditions, some deterioration of personal and household cleanliness in the district, the number of cases of scabies or of infestation with lice that has come to notice has been insignificant. During the year 1944 two cases of scabies in children were notified by a school authority. Of 11 patients admitted from this to the district Joint Fever Hospital during the year one was found to be infested with head-lice; no case of infestation with body-lice has come to notice. After the issue of the Ministry of Health Circular 2645, in May, 1942, dealing with scabies, I was informed by the County Medical Officer that the County Council had approved the recommendation "That the whole-time health visitors of the County Council be instructed to visit premises in which cases of scabies are reported at the request of a district medical officer of health or on the instructions of the county medical officer; and that no charge be made to the District Councils for such services." Advantage has been taken of this when it seemed expedient. No cleansing station has been provided by this District Council, as the need for one is so slight.

Venereal Disease: Assistance has been given in affording publicity to educative work in combatting venereal disease by displaying in public lavatories posters on the subject supplied by the County Council.

Water-Supply of the Area: There was no shortage during the year 1944, and the supply was satisfactory as to quality with the exception of that furnished by the Guisborough Water Company in July and September.

Samples for bacteriological examinations were submitted from the piped supply in Guisborough fortnightly, and for chemical analysis every three months: particulars of the results are given in the Appendix.

The Guisborough Water Company's raw water is plumbo-solvent and the Company are by Statute obliged to treat the water for plumbo-solvency before distribution. A sample of water taken on July 27th and submitted for chemical analysis was found to contain lead, 0·12 parts per 100,000 and the analyst's report stated that "the water is unwholesome and unsuitable for drinking purposes on account of the presence of lead." As soon as the report was received the attention of the Water Company was drawn to the unsatisfactory state of the water. The reply of the Water Company was that they had run out of sodium carbonate for treating the water; this arrived on August 7th and treatment was recommenced on August 8th.

A sample from the Guisborough Water Company's supply submitted for bacteriological examination on September 8th was reported as polluted and unsafe for drinking. The Water Company was at once informed and it was learned that the chlorinator was out of action; later the service tank was cleaned out and the bottom valve of the reservoir closed to ensure the flow of cleaner water to the filters. A sample submitted on September 14th was less heavily polluted but still "unsafe for drinking." A further sample taken on September 20th had a turbidity of 25 parts per million, silica scale, and was reported as "not of a high standard of bacterial purity the water is however considered wholesome in character and suitable for drinking and domestic purposes apart from the objections previously mentioned."

The following table gives the results of estimations by myself of free chlorine and of the pH. figure in samples from the Guisborough Water Company's piped supply:—

Free Chlorine			pH. figure		Free Chlorine			pH. figure	
(parts per million)					(parts per million)				
Jan. 19	...	0·1	8½		Aug. 28	...	0·15	8	
„ 27	...	0·1	9		„ 29	...	0·1	8	
Feb. 24	...	0·15	9		Sept. 8	...	0·1—	7	
Mar. 15	...	0·1	9		„ 13	...	0·1—	7	
„ 23	...	0·1	9		„ 18	...	0·1—	7	
April 17	...	0·1	8		„ 19	...	0·1—	8	
May 25	...	0·1—	10		„ 20	...	0·1	7	
June 8	...	0·1+	9		„ 29	...	0·3	8	
July 12	...	0·1—	8		„ 30	...	0·1+		
„ 27	...	0·1—	6		Oct. 3	...	0·7	8	
Aug. 5	...	0·1—	6		„ 27	...	0·1	8	
„ 8	...		6		Nov. 30	...	0·1	8	
„ 9	...		8		Dec. 15	...	0·1—		
„ 10	...		8						

The proportion of dwellinghouses in the district supplied from public water mains direct to the houses is estimated at 86%; the proportion supplied by standpipes is estimated at 11%; the proportion of the population so supplied may be taken as the same.

Post-war Housing: The Council's post-war programme has been declared as the erection of 66 houses in the first two years. It is proposed that these be erected on land occupied at present by allotments adjacent to the existing housing site north of Bolckow Street; the lay-out has been approved by the Ministry of Health and plans for the roads and sewers are in preparation.

I am, Madam and Gentlemen,

Your obedient servant,

C. R. GIBSON,

Medical Officer of Health.

Guisborough,

July 31st, 1945.

APPENDIX.

Statistics and Social Condition of the Area.

Area (in acres): 18,924.

Registrar-General's estimate of resident population, mid-1944: 7,737.

Number of inhabited houses (end of 1944) according to Rate-books: 2,234.

Rateable value: £29,280.

Sum represented by a penny rate: £122.

The main industries of the district are ironstone mining, iron and steel works, and agriculture; there is also a shirt factory in Guisborough.

1. SUMMARY OF VITAL STATISTICS.

Period.	Population.	Births.	Deaths.	Deaths at Ages		Deaths from all forms of Tuberculosis.	Yearly Birth-rate.	Yearly Death-rate.	Infant Mortality Rate (Infant deaths per thousand births).
				Under 1 year.	1-4 years.				
1884—1888	6,100	1100	552	161	88	—	36.1	17.1	146
1889—1893	5,623	849	410	94	56	—	30.2	14.6	108
1894—1898	5,630	910	413	98	44	—	32.4	14.7	108
1899—1903	5,645	932	468	132	50	—	33.0	16.6	142
1904—1908	6,300	1026	509	132	69	42	32.6	16.2	129
1909—1913	7,062	1044	542	128	56	58	29.6	15.4	122½
1914—1918	6,600	997	548	106	—	40	30.2	16.6	106
1919—1923	7,104	964	495	94	30	30	27.1	13.9	97½
1924—1928	6,656	651	440	53	31	33	19.6	13.2	81½
1929—1933	6,888	575	486	36	21	23	16.7	14.1	62½
1934—1938	7,987	665	506	31	17	28	16.6	12.7	46½
1939—1943	7,556	685	570	38	13	26	18.1	15.0	55½
1944	7,737	146	89	12	1	3	18.9	11.5	82

2. NOTIFIABLE DISEASES, 1944
(other than Tuberculosis).

	All Ages	Under 1 year	1 year	2	3	4	5	10	15	25	35	45	65	Cases Admitted Hospital	Total Deaths
Scarlet Fever	...	—	—	—	—	—	4	2	2	—	—	—	—	7	—
Diphtheria	...	—	—	—	—	—	—	—	1	—	—	—	—	1	—
Pneumonia	...	1	—	—	—	—	2	1	—	—	2	3	5	—	3
Erysipelas	...	—	—	—	—	—	—	—	—	1	—	—	1	1	—
Puerperal Pyrexia	...	—	—	—	—	—	—	—	—	1	—	—	—	—	—
Measles	...	—	1	—	—	—	1	3	—	—	—	—	—	—	—

3. PATIENTS ADMITTED TO GUISBOROUGH & DISTRICT
JOINT ISOLATION HOSPITAL
(from North Riding Combined Districts).

	1/4/33 to 31/3/34	34/35	35/36	36/37	37/38	38/39	39/40	40/41	41/42	42/43	43/44
Scarlet Fever	149	290	148	220	227	128	26	48	27	32	110
Diphtheria	54	132	23	30	32	73	32	56	73	36	22
Enteric Fever	2	3	—	44	4	1	2	1	2	—	—
Erysipelas	2	1	2	2	—	—	—	—	—	3	1
Puerperal Fever	3	3	4	5	3	1	—	—	1	1	1
Polio-myelitis	—	—	—	—	—	6	1	2	1	—	1
Cerebro-spinal Fever	—	—	—	—	—	1	12	18	5	6	4
Others	—	—	—	—	—	—	12	29	30	36	40
TOTAL	210	429	177	301	266	210	85	154	139	114	179
Service & outside patients (included)	—	—	—	—	—	—	16	25	24	29	32

Reports on Bacteriological Examination of Water Samples from domestic taps on Guisborough Water Co.'s supply (all from the North Riding Laboratory of Pathology and Public Health, Scarborough, with the exception of the sample taken Dec. 14th, which was submitted to the Counties Public Health Laboratories, E.C. 4.).

Date of Sample	Colonies from 1 c.c. on Agar in 3 days at 22° C.	Colonies from 1 c.c. on Agar in 2 days at 37° C.	Coliform Organisms in 100 c.c.	Strept.	B. Enteritis Sporog.
Jan. 27	...	12	0	0	0
Feb. 10	...	8	1	0	0
„ 24	...	2	0	0	0
Mar. 9	...	36	7	0	0
„ 24	...	10	1	0	0
May 10	...	1	1	0	0
„ 25	...	16	1	0	0
June 9	...	120	3	0	0
„ 20	...	18	2	0	0
„ 26	...	600	2	0	0
July 14	...	10	0	0	0
Aug. 10	...	10	6	0	0
„ 24	...	20	2	0	0
Sept. 8	...	1,560	26	180	0
„ 14	...	200	14	17	0
Oct. 6	...	16	4	0	0
„ 27	...	240	8	0	0
Nov. 16	...	12	5	0	0
„ 30	...	6	6	0	0
Dec. 14	...	1	1	0	0
„ 28	...	10	9	0	0

present in 10 c.c.

Summary of results of Chemical Analysis of Water Samples from domestic taps
on Guisborough Water Co.'s supply, 1944,

(Analysed by the Counties' Public Health Laboratory, E.C. 4.).

Date of Sample	...	Jan. 13	April 18	July 27	Sept. 20
Turbidity, parts per million, Silica Scale		5	5 —	8	25
Reaction p.H.	...	6·6	7·1	5·6	6·9
Total Solids dried at 180°C.	...	11·0	11·0	9·0	9·0
Free Carbonic Acid	...	0·5	0·3	1·8	0·4
Chlorine in Chlorides	...	2·2	2·0	2·0	1·5
Alkalinity as Calcium Carbonate	...	1·5	2·5	0·5	2·0
Hardness: Total	...	4·0	3·0	3·0	3·0
„ Temporary	...	0·0	0·5	0·0	0·0
Nitrogen in Nitrates	...	0·04	0·06	0·00	0·00
„ Nitrites	...	absent	absent	absent	absent
Free Ammonia	...	0·0032	0·0028	0·0056	0·0040
Albuminoid Ammonia	...	0·0018	0·0036	0·0050	0·0080
Oxygen Absorbed in 4 hours at 27°C.	...	0·105	0·085	0·105	0·30
Metals: Iron	...	0·010	0·007	0·025	0·050
„ Manganese	...	0·04	0·03	0·035	0·03
„ Lead	...	0·00	0·00	0·12	0·00
Free Chlorine, parts per million	...	0·15	0·07	absent	

(Chemical results in parts per 100,000).